

MONTHLY WEATHER REVIEW,

JULY, 1877.

WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE.

INTRODUCTION.

The present Review for the month of July depends on all data received up to the 14th of August from the Canadian Meteorological Service, the United States Navy, the Army Post Surgeons, Voluntary Observers and the United States Signal Service. The most interesting features have been: First, The few storms reported at sea. Second, The unusually large number of tornadoes occurring the first ten days of the month. Third, The general diminution of grasshoppers and locusts, and the slight amount of damage done by them as compared with the several years previous.

BAROMETRIC PRESSURE.

In General.—The general distribution of barometric pressure for the month is shown by the isobars on chart II, from which it will be seen that the highest pressure has been off the South Atlantic and Gulf coasts, both of these districts being included in the isobar of 30.00. The pressure has diminished very regularly from the coast in a northwest direction to Dakota, where the lowest average for the month will probably be found. There has been a general deficiency of pressure in comparison with past years, which is most marked in the South Atlantic States and the least marked in the Northwest. In the Rocky Mountains the deficiency has been about .04 of an inch, and nearly the same on the Pacific slope.

Barometric Range.—The general range of the barometer over the whole country east of the Rocky Mountains was about 1.03 inches, as may be seen from the following table, which gives the maximum and minimum pressures that occur on the tri-daily maps near the centres of the respective areas of high and low barometer:

LOW AREAS.				HIGH AREAS.			
No.	Location.	Date.	Minimum Pressure.	No.	Location.	Date.	Maximum Pressure.
I	Lake Huron.....	July 1st, 7:35 a. m.....	29.45	I	South Atlantic States...	July 1st, 7:35 a. m.....	30.17
II	Upper Mississippi val...	July 2nd, 4:35 p. m.....	29.56	II	Norfolk.....	July 8th, 7:35 a. m.....	30.15
III	Lower Missouri valley...	July 6th, 4:35 p. m.....	29.46	III	South Atlantic States...	July 15th, 7:35 a. m.....	30.14
IV	East Gulf States.....	July 10th, 4:35 p. m.....	29.80	IV	Toronto.....	July 23rd, 7:35 a. m.....	30.30
V	Lower Missouri valley...	July 14th, 4:35 p. m.....	29.28	V	Halifax.....	July 28th, 7:35 a. m.....	30.17
VI	Lower Lakes.....	July 19th, 7:35 a. m.....	29.48	VI	Montgomery.....	July 28th, 7:35 a. m.....	30.16
VII	Manitoba.....	July 27th, 4:35 p. m.....	29.53	VII	Quebec.....	July 31st, 4:35 p. m.....	30.20
VIII	Lower Missouri valley...	July 30th, 4:35 p. m.....	29.27				

The greatest local barometric ranges have been as follows: 0.94 at Bismarck and North Platte; 0.86 at Alpena, and 0.82 at Escanaba.

The least local barometric ranges have been: 0.29 at Galveston; 0.32 at Indianola; 0.35 at New Orleans, Vicksburg, Memphis and Mobile.